

Please type a plus sign (+) inside this box

→

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

Approved for use through 10/01/2002. GMD 861003  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**Substitute for form 1449A/PTO**

SEP 1 6 2004

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1

of

2

***Complete if Known***

Application Number	10/747,795
Filing Date	12/29/2003
First Named Inventor	Sreenivasan et al.
Group Art Unit	2851
Examiner Name	Kim, Peter B.
Attorney Docket Number	PA96-38D13

## U.S. PATENT DOCUMENTS

**EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box.

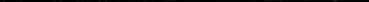
→

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

<p>Substitute for form 1449A/PTO</p> <p>SEP 1 2004 C37</p> <p><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b></p> <p>(use as many sheets as necessary)</p>				<p><b>Complete if Known</b></p> <table border="1"> <tr> <td>Application Number</td> <td>10/747,795</td> </tr> <tr> <td>Filing Date</td> <td>12/29/2003</td> </tr> <tr> <td>First Named Inventor</td> <td>Sreenivasan et al</td> </tr> <tr> <td>Group Art Unit</td> <td>2851</td> </tr> <tr> <td>Examiner Name</td> <td>Kim, Peter B.</td> </tr> <tr> <td>Attorney Docket Number</td> <td>PA96-38D13</td> </tr> </table>		Application Number	10/747,795	Filing Date	12/29/2003	First Named Inventor	Sreenivasan et al	Group Art Unit	2851	Examiner Name	Kim, Peter B.	Attorney Docket Number	PA96-38D13
Application Number	10/747,795																
Filing Date	12/29/2003																
First Named Inventor	Sreenivasan et al																
Group Art Unit	2851																
Examiner Name	Kim, Peter B.																
Attorney Docket Number	PA96-38D13																
Sheet	2	of	2	<p>01 SEP 16 PATENT &amp; TRADEMARK OFFICE</p>													

## FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	11/18/08
-----------------------	---	--------------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

SEP 16 2004

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

1

Of

4

**Complete if Known**

Application Number	10/747,795
Filing Date	12/29/2003
First Named Inventor	Sreenivasan et al.
Group Art Unit	2851
Examiner Name	Kim, Peter B.

Attorney Docket Number PA96-38D13

**U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
PK	D1	3,783,520		King	01-08-1974	
	D2	2003/0129542	A1	Shih et al.	07-10-2003	
	D3	6,383,928	B1	Eissa	05-07-2002	
	D4	6,329,256	B1	Ibok	12-11-2001	
	D5	5,736,424		Prybyla et al.	04-07-1998	
	D6	5,895,263		Carter et al.	04-20-1999	
	D7	6,150,231		Muller et al.	11-21-2000	
	D8	6,274,294	B1	Hines	08-14-2001	
	D9	6,391,798	B1	DeFelice et al.	05-21-2002	
	D10	6,489,068	B1	Kye	12-03-2002	
	D11	6,565,928	B2	Sakamoto et al.	05-20-2003	
	D12	6,646,662	B1	Nebashi et al.	11-11-2003	
	D13	6,677,252	B2	Marsh	01-13-2004	
	D14	6,716,767	B2	Shih et al.	04-06-2004	
	D15	2004/0029041	A1	Shih et al.	02-12-2004	
	D16	5,907,782		Wu	05-25-1999	
	D17	6,635,581	B2	Wong	10-21-2003	
	D18	5,700,626		Lee et al.	12-23-1997	
	D19	6,096,655		Lee et al.	08-01-2000	
	D20	5,948,570		Kornblit et al.	09-07-1999	
	D21	6,033,977		Gutsche et al.	03-07-2000	
	D22	5,198,326		Hashimoto et al.	03-30-1993	
	D23	4,976,818		Hashimoto et al.	12-11-1990	
	D24	4,891,303		Garza et al.	01-02-1990	
	D25	6,703,190	B2	Elian et al.	03-09-2004	
	D26	4,737,425		Lin et al.	04-12-1988	
	D27	5,314,772		Kozicki et al.	05-24-1994	
	D28	5,169,494		Hashimoto et al.	12-08-1992	
	D29	5,527,662		Hashimoto et al.	06-18-1996	
	D30	5,071,694		Uekita et al.	12-10-1991	
	D31	6,767,983	B1	Fujiyama et al.	07-27-2004	
	D32	6,514,672	B2	Young et al.	02-04-2003	
	D33	4,507,331		Hiraoka	03-26-1985	
	D34	4,426,247		Tamamura et al.	01-17-1984	

Examiner Signature

Date Considered

11/15/04

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**'Please type a plus sign (+) inside this box**

→

PTO/SB/08A (08-09)

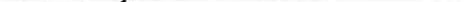
Approved for use through 10/31/2002. OMB 0851-0031

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				Application Number	10/747,795
				Filing Date	12/29/2003
				First Named Inventor	Sreenivasan et al.
				Group Art Unit	2851
				Examiner Name	Kim, Peter B.
Sheet	2	of	4	Attorney Docket Number	PA96-38D13

## FOREIGN PATENT DOCUMENTS

Examiner Signature		Date Considered	11/15/04
-----------------------	---	--------------------	----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0851-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449B/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

3

of

4

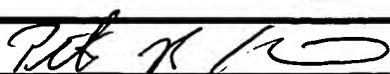
### Complete if Known

Application Number	10/747,795
Filing Date	12/29/2003
First Named Inventor	Sreenivasan et al.
Group Art Unit	2851
Examiner Name	Kim, Peter B.
Attorney Docket Number	PA96-38D13

### OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
PL	D37	Abstract of Japenese Patent 02-92603.	
PL	D38	Translation of Japenese Patent 02-92603.	
PL	D39	Abstract of Japenese Patent 02-24848.	
PL	D40	Translation of Japenese Patent 02-24848.	
PL	D41	HEIDARI et al., "Nanolithography at the 6 in. Wafer Scale," Journal of Vacuum Science Technology, Nov/Dec 2000, pp. 3557-3560, vol. B, no. 18(6)/	
PL	D42	NERAC.COM Retro Search, "Reduction of Dimension of Contact Holes", August 31, 2004	
PL	D43	NERAC.COM Retro Search, "Trim Etching of Features Formed on an Organic Layer", September 2, 2004	
PL	D44	NERAC.COM Retro Search, "Multilayer Resists Materials", September 2, 2004	

Examiner  
Signature



Date  
Considered

11/15/04

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231

Please type a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

Approved for use through 10/31/2002. GPO 0-537-003

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**Substitute for form 1449A/PTO**

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

## Sheet

4

of

4

***Complete if Known***

<b>Application Number</b>	10/747,795
<b>Filing Date</b>	12/29/2003
<b>First Named Inventor</b>	Sreenivasan et al.
<b>Group Art Unit</b>	2851
<b>Examiner Name</b>	Kim, Peter B.
<b>Attorney Docket Number</b>	PA96-38D13

## U.S. PATENT DOCUMENTS

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached Kinds of U.S. Patent Documents. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box

→

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO

## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 1

SEARCHED  SERIALIZED  INDEXED  FILED  BOOK NUMBER 17485 898 78

## U.S. PATENT DOCUMENTS

**\*EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>See attached *Kinds of U.S. Patent Documents*. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box

→

PTO/SB/08A (03-00)

Approved for use through 10/31/2002. OMB 0851-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**Substitute for form 1449B/PTO**

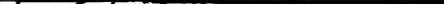
## **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 1

<i>Complete If Known</i>	
<b>Application Number</b>	10/747,795
<b>Filing Date</b>	12/29/2003
<b>First Named Inventor</b>	S. V. Sreenivasan
<b>Group Art Unit</b>	2851
<b>Examiner Name</b>	Peter B. Kim
<b>Attorney Docket Number</b>	PA96-38D13

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Signature		Date Considered	11/5/04
-----------------------	---	--------------------	---------

EXAMINER: Initial if reference considered, whether or not action is in conformance with MPEP 608. Draw line through a considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Unique citation designation number. <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.